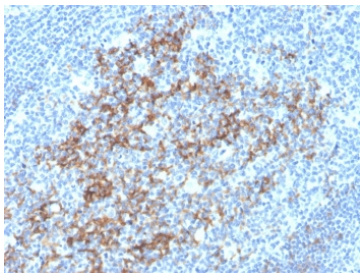
CD23 Antibody / B-Cell Activation and IgE Receptor Marker [clone FCER2/3592] (V7565)

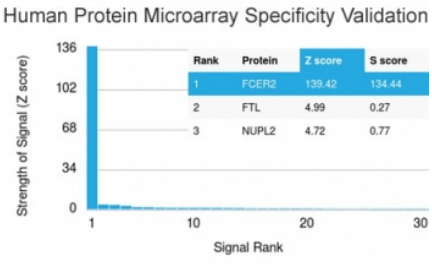
Catalog No.	Formulation	Size
V7565-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7565-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7565SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7565IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

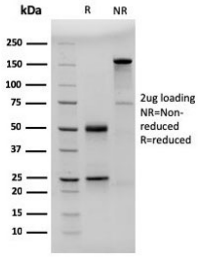
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	FCER2/3592
Purity	Protein G affinity chromatography
UniProt	P06734
Localization	Cell surface, cytoplasmic
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT Western blot: 2-4ug/ml
Limitations	This CD23 Antibody / B-Cell Activation and IgE Receptor Marker is available for research use only.



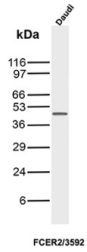
CD23 Antibody Tonsil IHC. Immunohistochemistry analysis of FFPE human tonsil tissue stained with CD23 antibody clone FCER2/3592. Distinct membranous and cytoplasmic HRP-DAB brown staining is observed in germinal center-associated B lymphocytes and follicular dendritic cell networks, consistent with the established expression pattern of Low-affinity immunoglobulin epsilon Fc receptor / FCER2/CD23 in reactive lymphoid follicles. The staining pattern highlights follicular architecture with strong positivity in B-cell-rich germinal center regions and comparatively minimal staining in surrounding interfollicular T-cell areas. Hematoxylin counterstain highlights nuclei in blue. HIER: boil tissue sections in pH6 citrate buffer for 10-20 min followed by cooling before antibody incubation.



Protein microarray validation of CD23 Antibody / B-Cell Activation and IgE Receptor Marker (clone FCER2/3592). Analysis of the HuProt microarray containing more than 19,000 full-length human proteins was performed using CD23 antibody clone FCER2/3592. The antibody demonstrates highest reactivity with FCER2, confirming target specificity, with markedly lower signal intensity observed for non-target proteins. These results support the specificity of the FCER2/3592 monoclonal antibody for CD23. Z- and S-score explanation: The Z-score represents the strength of the fluorescent signal generated when the antibody binds to a specific protein on the HuProt array, expressed as standard deviations above the mean signal of all proteins on the array. When proteins are ranked in descending order by Z-score, the S-score represents the difference in Z-scores between sequentially ranked proteins. The S-score therefore reflects the relative specificity of the antibody for its intended target compared to other proteins present on the array.



SDS-PAGE analysis of purified, BSA-free CD23 antibody (clone FCER2/3592) as confirmation of integrity and purity.



CD23 Antibody Daudi WB. Western blot analysis of Daudi cell lysate using CD23 antibody clone FCER2/3592. A distinct band is detected at approximately 45 kDa, consistent with the predicted molecular weight of Low-affinity immunoglobulin epsilon Fc receptor / FCER2/CD23. The strong signal in this B-cell lineage cell line supports the established role of CD23 in mature B-cell function, IgE receptor signaling, and adaptive immune regulation associated with activated lymphoid populations.

Description

Low-affinity immunoglobulin epsilon Fc receptor (FCER2), more commonly known as CD23, is a type II transmembrane glycoprotein involved in regulation of IgE-mediated immune responses, B-cell activation, and adaptive immunity. CD23 Antibody / B-Cell Activation and IgE Receptor Marker is useful for studying germinal center biology, follicular immune architecture, lymphoid differentiation, and immune signaling pathways associated with activated B-cell populations. CD23 is primarily expressed on mature B lymphocytes, follicular dendritic cells, activated macrophages, and select epithelial and hematopoietic cell populations.

CD23 antibody, also referred to as FCER2 antibody or Low-affinity IgE receptor antibody in the literature, recognizes the low-affinity receptor for immunoglobulin E. CD23 functions in regulation of IgE synthesis, antigen presentation, B-cell

proliferation, and cytokine-mediated immune signaling. The protein localizes predominantly to the cell membrane but can also undergo proteolytic cleavage to generate soluble CD23 fragments involved in immunomodulatory signaling pathways. Through these activities, CD23 contributes to coordination of allergic responses, humoral immunity, and lymphocyte activation.

Within lymphoid tissues, CD23 expression is strongly associated with germinal center-associated B cells and follicular dendritic cell meshworks. In immunohistochemistry applications, CD23 staining is frequently used to evaluate follicular architecture, identify follicular dendritic cell networks, and characterize B-cell lineage populations in reactive and neoplastic lymphoid tissues. CD23 is widely used in hematopathology research involving chronic lymphocytic leukemia, small lymphocytic lymphoma, follicular lymphoma, and related B-cell proliferative disorders. The marker is particularly valuable when interpreted together with additional B-cell lineage and germinal center-associated markers.

CD23 also plays an important role in allergic inflammation and immune regulation through interactions with IgE and cytokine-responsive signaling pathways. Elevated CD23 expression has been associated with allergic disease, asthma, chronic inflammatory states, and altered immune activation. Beyond hematologic biology, CD23 has been investigated in epithelial immunity, antigen processing pathways, and regulation of adaptive immune responses within mucosal tissues.

CD23 Antibody / B-Cell Activation and IgE Receptor Marker clone FCER2/3592 is supported by western blot, immunohistochemistry, and HuProt microarray specificity validation data. Western blot analysis demonstrates the expected CD23 band in Daudi B-cell lineage lysates, while immunohistochemistry highlights germinal center-associated immune cell populations within tonsillar lymphoid tissue. The included HuProt microarray specificity validation data further supports selective target recognition suitable for studies involving B-cell activation, immune regulation, and lymphoid tissue characterization.

Explore additional immune and lymphoid research targets in our Immunology Antibodies page featuring markers involved in B-cell signaling, germinal center biology, adaptive immunity, and hematologic disease research.

Application Notes

Optimal dilution of the CD23 Antibody / B-Cell Activation and IgE Receptor Marker should be determined by the researcher.
1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

A recombinant human FCER2/CD23 protein fragment within amino acids 48-321 was used as the immunogen for the CD23 antibody protein microarray validated clone FCER2/3592.

Storage

Store the CD23 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

FCER2 antibody, Low affinity IgE receptor antibody, Fc epsilon receptor II antibody, B-cell activation marker antibody, Germinal center B-cell marker antibody

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